

PATENT**REMARKS**

In the Office Action, the Examiner rejected claims 1, 5-9 and 18-20 under 35 USC §102; and rejected claims 3, 4 and 21-37 under 35 USC §103(a). These rejections are fully traversed below.

Claims 1, 35 and 36 have been amended to further clarify the subject matter regarded as the invention. New claim 38 has been added to the application. Claims 4 and 34 have been cancelled without prejudice or disclaimer. Claims 1-3, 5-10, 18-33 and 35-38 are pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS 1, 2, 5-10 AND 18-20 UNDER 35 USC §102(a)

In the Office Action, the Examiner rejected claims 1, 5-9 and 18-20 under 35 USC §102(a) as being anticipated by Allen et al., U.S. Patent Pub. 2002/0149705. This rejection is fully traversed below.

Claim 1 pertains to a system that enhances an audio system having an audio output terminal. The system includes an external wireless RF transmitter that connects to the audio output terminal to receive audio output from the audio system and wirelessly transmits signals corresponding to the audio output. The transmitted signals are received at a personal audio device usable by a user to hear the audio output. The audio output can be customized for a particular user based on the audio output and a user hearing profile regarding a particular user.

On pages 3 and 4 of the Office Action, the Examiner relies on Allen et al. in order to reject claim 1. Allen et al. describes a hybrid communicator/remote control that includes a display screen configured to display a contact list.

Initially, it should be noted that nothing in Allen et al. pertains to enhancing an audio system through use of a wireless RF transmitter and a personal audio device. Paragraph [0096] of Allen et al. indicates that a verbal identifier 526, such as a digital audio sample of a contact's spoken name, can be reproduced at

PATENT

a speaker 242 of a hybrid communicator/remote control 106. "This may allow, for example, a visually impaired individual to easily select a contact 520 from the list 252." Allen et al., paragraph [0096]. However, merely reproducing, i.e., playing back, a recorded spoken name for a contact is not in any way enhancing an audio system as is recited in claim 1. Further, claim 1 recites "wherein said system generates a customized audio output based on the audio output and at least the user hearing profile...." According to claim 1, the customization results from the audio output and the user hearing profile. Although the Examiner references paragraph [0096] of Allen et al., nothing therein teaches or suggests any sort of audio customization of a recorded spoken name. In other words, in Allen et al., a given contact's name is spoken the same way regardless of the user. In other words, Allen et al. does not teach or suggest any customization of the audio output.

Additionally, claim 1 has been amended to include the limitations previously recited in claim 34. Previously, on page 8 of the Office Action, with respect to claim 34, the Examiner admitted to several deficiencies of Allen et al. However, the Examiner alleged that these deficiencies were somehow obvious or obvious design choices. First, it should be noted that the system of claim 1 serves to enhance an existing audio system through use of an external wireless RF transmitter and a personal audio device. The audio system has a housing, and the wireless RF transmitter is external to the housing but connects to the audio output terminal. Allen et al. clearly does not teach or suggest a wireless RF transmitter that is external to the housing but connected to an audio output terminal. In Allen et al. both the wireless transmitter 202 in the set-top box 102 and the wireless transmitter 202 in the hybrid communicator / remote control 106 are internal components to their respective housings. Hence, Allen et al. not only does not teach use of a RF transmitter that is external to a housing, but also does not teach or suggest having the external RF transmitter connected to an externally-accessible audio output terminal of the housing. Given that the audio system of claim 1 serves to adapt or enhance an existing audio system, being

PATENT

able to connect an external RF transmitter allows the audio system to be adapted in an after market manner.

Based on the foregoing, it is submitted that claim 1 is patentably distinct from Allen et al. In addition, it is submitted that dependent claims 5-9 and 18-20 are also patentably distinct for at least the same reasons. The additional limitations recited in the independent claim or the dependent claims are not discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from Allen et al. For example, claim 20 recites that the "personal audio device is wearable by the user." On page 5 and 8 of the Office Action, the Examiner makes reference to the hybrid communicator / remote control 106 and its headset 264. While the headset 264 might itself be wearable, the hybrid communicator / remote control 106 is not wearable.

Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 1, 5-9 and 18-20 under 35 USC §102(a).

REJECTION OF CLAIMS 3, 4 AND 35 UNDER 35 USC §103(a)

In the Office Action, the Examiner rejected claims 3, 4 and 35 under 35 USC §103(a) as being unpatentable over Allen et al. in view of Zurek et al., U.S. Patent 6,363,139. This rejection is fully traversed below.

It is enough that the above-noted deficiencies of Allen et al. cannot be overcome by combining Allen et al and Zurek et al. Moreover, ingenuity would be required for one skilled in the art to combine these references in the manner proposed by the Examiner. Hence, it is submitted that the combination of these references is improper. Additionally, with regard to a user hearing profile, the Examiner points to col. 6, lines 59-63 of Zurek et al. This portion of Zurek et al. pertains to the earpiece 60 as shown in Fig 7. However, Allen et al. does not make use of an earpiece, so the manner of combining these references is not evident. Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 3 and 35 under 35 USC §103(a).

PATENT**REJECTION OF CLAIMS 21-33 UNDER 35 USC §103(a)**

In the Office Action, the Examiner rejected claims 22, 24-26, 29-31 and 33 under 35 USC §103(a) as being unpatentable over Warren et al. in view of "Technology Introduction," America Technology Corporation, 2001, pp. 1-19 (hereafter "ATC"); rejected claims 21 and 23 under 35 USC §103(a) as being unpatentable over Warren et al.; rejected claims 27 and 32 under 35 USC §103(a) as being unpatentable over Warren et al. in view of Okubo et al, U.S. Patent 5,450,494; and rejected claim 28 under 35 USC §103(a) as being unpatentable over Warren et al. in view of ATC and further in view of Okubo et al. and further in view of Brian, Marshall, "How USB Ports Work," October 11, 2002, www.howstuffworks.com/usb (hereafter "Brain"). These rejections are also fully traversed.

Claims 21 and 23

Claim 21 pertains to a system that enhances an audio system having an audio output terminal. The system includes an external wireless RF transmitter provided as an attachment that removably connects to the audio output terminal to receive audio output from the audio system and wirelessly transmits signals corresponding to the audio output. The transmitted signals are received at a personal audio device usable by a user to hear the audio output. On pages 14 and 15 of the Office Action, the Examiner relies on Warren in order to reject claim 21.

In Warren, as shown in FIG. 1, a cell phone 32 can send and receive signals wirelessly to and from eyeglasses 10. However, in contrast to claim 21, the cell phone 32 in Warren does not use, teach or suggest an external wireless RF transmitter that attaches to and is removable from an audio output terminal of an audio system. On page 15 of the Office Action, Examiner admits that Warren is deficient in this regard. However, the Examiner concluded, based on speculation, that "it would have been obvious to one of ordinary skill in the art to make the antenna or other wireless transmitter removable...."

PATENT

Applicant respectfully disagrees with the conclusion that claim 21 is obvious in view of Warren. Nothing in Warren describes that it has an audio output terminal that can have an external wireless RF transmitter attachable thereto. Indeed, Warren actually teaches that it has an internal RF transmitter. Consequently, there would be no need or motivation for Warren to be adapted to further include an external RF transmitter, let alone an external wireless RF transmitter that is attachable to an audio output terminal.

Moreover, a reference *teaches away* when a person of ordinary skill, upon examining the reference, would be discouraged from following the path set out in the reference, or would be led in a direction different from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Here, Warren clearly discourages users from adapting a cell phone 32 to further include an external RF transmitter.

Based on the foregoing, it is submitted that claim 21 is patentably distinct from Warren. Thus, it is respectfully requested that the Examiner withdraw the rejection of claim 21 under 35 USC §103(a).

For at least the reasons noted above, it is respectfully requested that the Examiner withdraw the rejection of claim 21 under 35 USC §103(a). Applicants also disagree that claim 23 pertains to an obvious design choice.

Claims 24-28

Claim 24 pertains to a personal audio device that is for use by a user to hear audio sound. The audio device is not only personal to a user but also mobile. Claim 24 also recites that the personal audio device includes an ultrasonic speaker that produces a directional acoustic output. On page 9 of the Office Action, the Examiner admits that Warren does not teach an ultrasonic speaker. In view of this deficiency, the Examiner relies on ATC to teach an ultrasonic speaker.

Initially, it is submitted that at the very least ingenuity would be required for one skilled in the art to combine these references in the manner proposed by the

PATENT

Examiner. Specifically, there is no teaching or suggestion as to how one skilled in the art would combine the relatively large hypersonic speakers of ATC with the relatively small eyeglasses of Warren. Moreover, the combination of the ATC hypersonic speakers (which are intended to carry sound over significant distances) with Warren's eyeglasses would be counter to ATC's intended purpose. Namely, the speaker used with the eyeglasses in Warren is not intended to transmit audio to be heard at a sizable distance away (instead it concerns short distances relative to the ATC systems, i.e., centimeters not meters). Indeed, when in close proximity to its emission, the hypersonic output from the hypersonic speakers may not even be audible. Thus, if ATC's speaker were to be combined with Warren's eyeglasses, as proposed by the Examiner, the user/wearer of the eyeglasses may hear nothing. The rationale is supported, for example, in ATC, page 13, Ultrasonics & Audio section, wherein it notes that ultrasonic energy is emitted but must be demodulated in air before audio sound is produced. Hence, it is submitted that the combination of these references is improper. Accordingly, common sense dictates that one of ordinary skill in the art would not attempt to combine ATC with Warren as proposed by the Examiner. *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 82 U.S.P.Q.2d 1687 (Fed. Cir. 2007) ("common sense ... demonstrates why some combinations would be obvious and other would not").

Thus, it is respectfully requested that the Examiner withdraw the rejection of claim 24 under 35 USC §103(a). For at least similar reasons, it is also respectfully requested that the Examiner withdraw the rejection of dependent claims 25-28 under 35 USC §103(a).

Claims 29-33

Claim 29 pertains to a method for providing audio sound output from an audio system to a user in a wireless manner. Among other things, claim 29 recites use of a wireless audio adapter. As noted above, there is no reasonable basis to provide a wireless audio adapter to the cell phone 32 in Warren because the cell phone 32 already has an internal transmitter. In claim 29, the wireless audio adapter is also removably attached to an audio output port of the audio

PATENT

system. This allows the wireless audio adapter to be provided, for example, as an after-market product that serves to adapt the audio system. Audio signals can then be wirelessly transmitted via the wireless audio adapter to a specific personal device that has a directional speaker, which is an ultrasonic speaker. Nothing in Warren teaches or suggests a wireless audio adapter or wireless transmission of audio signals to a specific personal device that has an ultrasonic speaker. Moreover, the combination of Warren with ATC is improper as discussed above. Therefore, it is respectfully requested that the Examiner withdraw the rejection of claim 29 under 35 USC §103(a). For at least similar reasons, it is also respectfully requested that the Examiner withdraw the rejection of dependent claims 30-33 under 35 USC §103(a).

SUMMARY

It is submitted that claims 1-3, 5-10, 18-33 and 35-37 (as well as new claims 38) are patentably distinct from the cited references. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned representative at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-3874.

Respectfully submitted,



C. Douglass Thomas
Reg. No. 32,947

(650) 903-9200 x103